WARTIME AGRICULTURAL PRODUCTION ADJUSTMENTS IN OHIO FOR 1943

Department of Rural Economics and Rural Sociology
Mimeograph Bulletin No. 151

Ohio State University
and
Ohio Agricultural Experiment Station

Columbus, Ohio
June, 1942

TABLE OF CONTENTS

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Prepared by Work Committee 1/

Approved by State Committee June 16, 1942

INTRODUCTION

During the spring of 1942 a project designed for providing a "better basis for ascertaining potential agricultural production, for harmonizing production and needs, and for distributing goals according to the productive capacity of each region, area, and farm and to the rapidity with which this productive capacity should or can be utilized" was set up and completed in the State of Ohio. More specifically, the main objectives were: (1) to assemble for each type of farming area and the State a schedule of estimates of the production of agricultural commodities which appear (a) feasible, and (b) potential in 1943 under prescribed conditions; (2) to develop suggestions on how the adjustments in production may be achieved; and (3) to indicate the long-time desirable level of production. This production study was undertaken at the request of the Bureau of Agricultural Economics and received the close cooperation of the Ohio Agricultural Experiment Station, the Ohio Extension Service, and other federal agricultural agencies.

Early in April, a State Committee was organized to sponsor and facilitate the study of the farm production and the adjustments needed for achieving such production in the various type-of-farming areas of Ohio. The membership of this committee consisted of representatives of the following organizations:

Ohio Agricultural Experiment Station
Ohio Agricultural Extension Service
Bureau of Agricultural Economics
Soil Conservation Service
Agricultural Adjustment Agency

1/ J. I. Falconer, Ohio Agricultural Experiment Station, Chairman; F. L. Morison, Ohio Agricultural Experiment Station; George T. Schaefer, Bureau of Agricultural Economics.

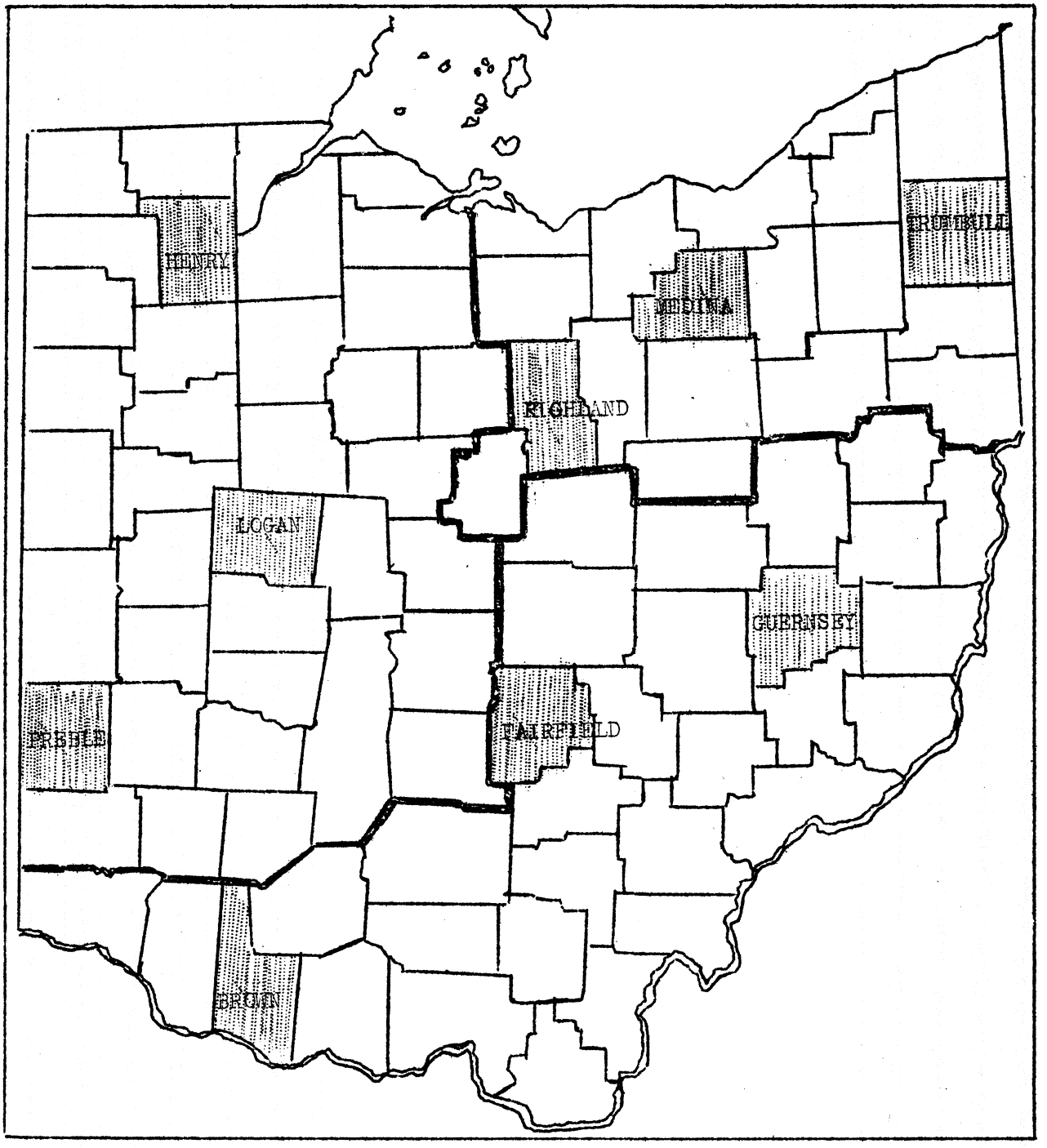
Farm Security Administration
Central States Forest Experiment Station

J. I. Falconer (Chairman of the Rural Economics Department of Ohio State University) served as chairman of this committee and also a work committee composed of himself, F. L. Morison (Ohio Experiment Station) and George T. Schaefer (B.A.E. Regional Office). The Work Committee was given the responsibility of assembling the basic data, developing various sets of production estimates, discovery of factors limiting production and their seriousness and preparing a state report for review by the State Committee. Throughout the development of the project, the work group deviated as little as possible from the basic assumptions contained in the various memoranda issued from time to time by the Bureau of Agricultural Economics in connection with the study as it was carried on throughout the nation. Any modification of prescribed assumptions is noted in the discussion of specific problems or adjustments.

Three, two-man, field crews were organized to assemble basic primary data in nine sample counties selected for their representativeness of the three major type-of-farming areas of Ohio --Map I. Each crew worked in one sample county in each of the major farming areas during the period of April 13 - May 9. The field personnel was furnished by the various state and federal agricultural agencies:

Crew I	B.A.E. - S.C.S.
Crew II	Ohio Agricultural Experiment Station - A.A.A.
Crew III	Ohio Agricultural Extension Service - F.S.A.

Various sources of information were exhausted in the search for the facts and conditions involved in the production situation, present and prospective, in each of the sample counties. The field crew spent three days in a county and met with three groups of farmers (6 - 12 per meeting) representing important types of farming systems. A meeting was held with the County U. S. D. A. War Board in each of the sample counties. Several Country bankers, machine and feed dealers, employment service officials, etc. were interviewed in the various



Map of Ohio showing three agricultural areas and the nine sample counties.

county seats. Where it appeared desirable, additional time was spent in studying special commodities and problems.

The Work Committee drew heavily from the material secured in the sample counties in building up the crop and livestock estimates for 1942 and 1943. The long-time desirable production estimates were based largely upon those made by the county agricultural planning committees during the period 1936 - 1939. Area estimates were developed first and then summated for the State.

The crop estimates were appraised by the Agronomy Department of Ohio State University, while the livestock estimates were checked by the animal husbandry staff. These specialists suggested only minor changes in the estimates for the long-time desirable production and accepted those for 1942 and 1943.

Next, the Work Committee presented to the State Committee (June 16, 1942) its estimates -- 1942 expected agricultural production, 1943 feasible and potential and the long-time desirable -- and a discussion of the problems involved in attaining the estimated production, the factors limiting further increases in production of crops and livestock, and proposed ways and means for facilitating production throughout Ohio. The State Committee reviewed the report and approved it with few changes. In addition, representatives of the A.A.A., F.S.A., and S.C.S. presented to the Committee a written statement (appended to this report) explaining the Ohio production situation and suggesting what might be done to facilitate increased production in 1943 from the standpoint of the particular agency.

Following the meeting of the State Committee, the working group completed and revised certain sections of the report in keeping with the comments and suggestions received.

ESTIMATED PRODUCTION IN OHIO IN 1943
(See Table 1)

(A) Crop Production

It was the general opinion of Ohio farmers that because of shortages of labor and machinery, acreages of the various intertilled crops in 1943 could not be greatly expanded over those in 1942.

Corn acreage in 1942 was estimated at 3,400,000, an increase of 4.6 per cent over 1941; little change was anticipated from 1942 to 1943. The long-time desirable acreage was reduced to 2,800,000 but with increased use of adapted hybrids and other improved production practices, it was estimated that this acreage would produce as many bushels of corn as were raised annually during the 10-year period 1930-1939 or as much as the estimated production for 1942 or 1943.

Soybeans for grain, a profitable crop and one having a low labor requirement, will be expanded to 1,130,000 acres in 1942 and 1943, an increase of 68 per cent over 1941, or double the increase required to reach the 1942 goal of 900,000 acres. Soybean hay acreage will be reduced from 221,000 in 1941 to an estimated 125,000 in 1943. Thus part of the expansion in the oil bean acreage comes from a shift in the use of the total soybean acreage, although the greater part comes from reduction in the acreages of wheat, rotation pasture, hay and idle crop land. Farmers in all areas were of the almost unanimous opinion that the 1942 and 1943 acreage of soybeans would be undesirable over a long period because of reduced seedings of clovers and other legumes resulting from the introduction of soybeans into their rotations, accordingly the long-time desirable acreage of soybeans was reduced to 850,000* which together with the small acreage of beans for hay is about the same

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*These long-time desirable acreages of corn and soybeans are at some variance from those recommended to the county land-use committees in their work in 1938. At that time the possibilities of hybrid corn were not realized, nor was it possible to foresee the effect of the combine on the expansion of the soybean acreage.

Table 1. - Estimates of Feasible Production for 1943 and Comparative Data from OHIO

Item	Unit	Reported for 1/			Revised goal for 1942	Expected in 1942 2/	Estimated for 1943 3/	Long-time desirable 4/	Percent Change from 1941		
		1930 - 1939 average	1940	1941					1942	1943	Long Time
1. Corn, for all purposes	acres 5/	3,603,000	3,220,000	3,252,000		3,400,000	3,396,000	2,800,000	+4.6	+4.4	-14
	bu.	139,956,000	122,360,000	160,974,000		142,994,000	142,834,000	142,200,000	-11	-11	-12
2. Soybeans, for beans	acres 6/	137,000	570,000	674,000	900,000	1,130,000	1,130,000	850,000	+68	+68	+26
	bu.	2,694,000	8,835,000	13,143,000		21,060,000	21,020,000	20,145,000	+60	+60	+53
3. Soybeans & cow-peas, for hay	acres 6/	163,000	353,000	221,000		135,000	125,000	40,000	-39	-44	-82
	tons	223,000	459,000	343,000		191,250	177,800	66,000	-44	-48	-81
9. Tobacco, burley	acres 6/	14,800	12,500	11,600	13,744	12,500	12,500	13,000	+8	+8	+12
	100 lbs.	122,060	125,000	111,360		109,400	109,400	136,000	-2	-2	+22
10. Tobacco, cigar filler	acres 6/	19,790	16,200	12,600	17,571	11,500	11,000	15,000	-9	-13	+19
	100 lbs.	193,400	164,430	141,750		115,000	110,000	180,000	-19	-22	+27
14. Sugar beets	acres 5/	39,000	45,000	41,000		49,000	49,000	45,000	+20	+20	+10
	tons	277,000	375,000	395,000		390,000	390,000	472,000	-1	-1	+19
15. Irish potatoes	acres 5/	129,000	93,000	87,000	100,000	84,000	80,000	120,000	-3.5	-8	+38
	bu.	12,652,000	9,476,000	10,614,000		8,840,000	8,415,000	15,635,000	-17	-21	+47
19. Canning peas, commercial(shelled)	acres 5/	4,700	5,500	6,200		9,200	9,500	7,500	+48	+53	+21
	tons	2,830	4,820	3,130		5,400	5,580	5,600	+72	+78	+79
20. Canning Tomatoes commercial	acres 5/	16,500	24,500	29,100		36,800	38,000	35,000	+26	+31	+20
	tons	96,700	125,100	213,800		233,950	241,800	280,000	+9	+13	+31
21. Other canning vegetables, com.	acres 5/	7,070	8,100	8,000		7,800	7,800	9,000	-2.5	-2.5	+12
22. Fresh vegetables total com.	acres 6/	34,000	39,000	39,000		45,000	45,000	45,000	+15	+15	+15
23. Sweet corn, canning	acres 5/	24,520	20,700	29,500		32,500	32,500	26,000	+10	+10	-12
	tons	40,400	29,800	58,600		57,400	57,400	57,000	-2	-2	-3
24. Onions, dry	acres 6/	3,710	1,500	1,300		1,000	1,000	1,500	-23	-23	+15
	100# sack	486,000	255,000	214,000		140,000	140,000	255,000	-35	-35	+19
25. Popcorn	acres 6/	6,500	5,500	8,300		9,000	9,000	7,000	+8	+8	-16
	1000 lbs.	10,400	7,700	14,525		15,300	15,300	14,400	+5	+5	-1
28. Total inter-tilled crops (lines 1-27inc.)	acres	4,202,590	4,414,500	4,420,600		4,963,300	4,946,300	4,014,000*	+12.2	+11.9	-9.0

Table 1. (Cont'd) - Estimates of Feasible Production for 1943 and Comparative Data for OHIO

Item	Unit	Reported for 1/			Revised goal for 1942	Expected in 1942 2/	Estimated for 1943 3/	Long-time desirable 4/	Percent Change from '41		
		1930 - 1939 average	1940	1941					1942	1943	Long time
29. Oats, for grain	acres 5/	1,464,000	1,037,000	1,218,000		1,224,000	1,229,000	1,016,000	+0.5	+0.9	-17
	bu.	42,814,000	44,396,000	51,374,000		42,217,000	42,402,000	43,425,000	-18	-18	-16
30. Barley	acres 5/	52,000	30,000	40,000		59,000	69,000	95,000	+48	+72	+138
	bu.	1,194,000	840,000	1,140,000		1,546,000	1,799,000	3,115,000	+36	+58	+173
31. Wheat	acres 5/	2,127,000	1,979,000	2,019,000	1,636,000	1,777,000	1,770,000	1,915,000	-12	-12	-5
	bu.	40,876,000	42,121,000	48,978,000		35,235,300	35,161,800	43,250,000	-28	-28	-12
32. Rye, for grain	acres 6/	68,000	72,000	72,000		80,500	80,500	75,000	+12	+12	+4
	bu.	963,000	1,296,000	1,332,000		1,172,000	1,172,000	1,250,000	-12	-12	-6
35. Buckwheat	acres 6/	20,000	16,000	9,000		7,000	7,000	7,000	-22	-22	-22
	bu.	330,000	288,000	158,000		117,500	117,500	130,000	-26	-26	-18
36. Total small grain (lines 29-35b, inc.)	acres	3,731,000	3,134,000	3,358,000		3,147,500	3,155,500	3,108,000*	-6.3	-6.0	-7.5

Table 1.(Cont'd) Estimates of Feasible Production for 1943 and Comparative Data for OHIO

Item	Unit	Reported for 1/ 1930 - 1939 Average	Reported for 1/ 1940	Reported for 1/ 1941	Revised goal for 1942	Expected in 1942 2/	Estimated for 1943 3/	Long-time desirable 4/	Percent Change from '41 1942	1943	Long Time
37. Hay, alfalfa	acres 6/	384,000	450,000	486,000		510,000	524,000	500,000	+5	+8	+3
	tons	719,000	900,000	923,000		1,020,000	1,048,000	1,300,000	+10	+14	+41
38. Hay, all other excluding alfalfa,								(850,000 alfalfa mixtures)			
sorghums, peanuts,	acres 6/	2,076,000	1,795,000	1,720,000		1,639,000	1,625,000	2,000,000	-5	-6	+16
and soybeans	tons	2,045,000	2,483,000	2,059,000		2,135,000	2,112,000	3,425,000	+4	+3	+66
38a. Hay, wild	acres 6/	5,000	6,000	5,000		5,000	5,000	5,000	0	0	0
	tons	3,000	5,000	4,000		4,000	4,000	4,000	0	0	0
39. Hay (hay cut	acres 6/	139,800	257,000	209,000		209,000	225,000	260,000	0	+8	+24
crops(no hay cut		125,100	190,000	117,000		120,000	120,000	190,000	+3	+3	+62
cover crop seeds	100 lbs.	206,208	342,900	242,400		263,200	276,000	450,000	+9	+14	+86
40. Rotation past.	acres 6/	1,567,000	1,592,500	1,505,900		1,350,000	1,359,000	1,309,000	-10	-10	+25
41. Potential crop-land pastured	acres 6/	1,000,000	1,000,000	1,000,000		1,000,000	1,000,000	450,000	0	0	-65
42. Total sod crops (lines 37-41 inc.)	7/ acres	5,157,100	5,033,000	4,833,900		4,624,000	4,633,000	5,035,000	-4	-4	+4
42a. Idle	acres	913,000	900,000	900,000		800,000	800,000	800,000	-11	-11	-11
43. Total for crops (sum lines 28,36,42b)	acres	14,003,690	13,481,000	13,512,500		13,534,800	13,534,800	12,957,000	+0.2	+0.2	-4.1

Table 1.(Cont'd) Estimates of Feasible Production for 1943 and Comparative Data for OHIO

Item	Unit	Reported for 1/			Revised goal for 1942	Expected in 1942 2/	Estimated for 1943 3/	Long-time desirable 4/	Percent Change from '41		
		1939	1940	1941					1942	1943	Long time
44.Total cattle and calves,all ages,Jan.1	No.	1,991,000	2,029,000	2,070,000		2,132,000	2,165,000	2,330,000 *	+3	+5	+11
45.Beef & veal produced,net liveweight	1000 lbs.	469,815	472,715	486,790		477,000	484,000	540,000	-2	-1	+11
46.Total hogs and pigs,all ages,Jan.1	No.	2,800,000	3,420,000	3,181,000		3,181,000	3,277,000	2,800,000	0	+3	-12
47.Sows & gilts to farrow in spring 1/1 to 6/1	No.	424,000	450,000	392,000		459,000	474,000	400,000	+17	+21	+2
47a.Sows & gilts to farrow in previous fall 6/1 to 1/1	No.	320,000	375,000	367,000		360,000	372,000	326,000	-2	+1	-10
48.Pork produced, net liveweight	1000 lbs.	942,606	1,070,773	1,050,727		1,200,000	1,240,000	1,000,000	+14	+18	-5
49.Total sheep and lambs,all ages,Jan.1	No.	2,295,000	2,295,000	2,276,000		2,269,000	2,314,000	2,600,000 *	-0.3	+1.7	+14
50.Lamb & Mutton produced,net liveweight	1000 lbs.	75,220	73,085	74,796		74,800	75,200	85,000	0	+0.5	+13
51. Wool shorn	1000 lbs.	16,022	15,824	15,706		15,995	16,315	18,200	+2	+4	+16
52.Milk cows,2 yrs. old & over,Jan.1	No.	1,018,000	1,022,000	1,042,000	1,056,000	1,073,000	1,089,000	1,075,000 *	+3	+4.5	+3
53.Milk produced	1000 lbs.	4,570,000	4,617,000	4,838,000	5,270,000	5,221,000	5,400,000	6,450,000 *	+8	+12	+33
54.Chickens over 3 mos.old&over Jan.1	No.	20,888,000	21,548,000	21,275,000		22,711,000	23,190,000	24,000,000	+7	+9	+13
55.Chickens produced net liveweight	1000 lbs.	119,007	107,414	120,718		133,520	135,200	142,000	+11	+12	+18
56.Eggs produced	1000 doz.	182,250	185,833	195,916	218,417	220,715	227,160	265,000	+13	+16	+35
57.Turkeys produced, net liveweight	1000 lbs.	11,565	14,179	12,540		12,540	12,540	14,000	0	0	+12
57.Horses,mules,and colts on farms,Jan.1	No.	484,000	472,000	459,000		433,000	420,000	250,000	-6	-8	-46
57a.Colts foaled	No.	24,000	21,000	16,000		15,000	14,000	12,000	-6	-12	-25

Table 1. (Cont'd) Estimates of Feasible Production for 1943 and Comparative Data for OHIO

	Item	Unit Thousands	Reported for 1/ 1939	1940	1941	Revised goal for 1942	Expected in 1942 2/	Estimated in 1943 3/	Long-time desirable	Percent Change from 1941 1942	1943	Long Time
Farm forest products: 8/												
61.	Lumber	bd.ft.	110,545	103,794	270,000		337,500	371,250		+25	+38	
62.	Pulpwood	cords	20	21	24.6		28.55	30.8		+16	+25	
63.	Fence posts	No.	7,200	8,000	9,000		11,000	11,000		+22	+22	
64.	Fuel wood	cords	1,300		1,500		1,800	2,000		+20	+33	
65.	Mine props	pieces	3,235	3,552	4,560		5,140	5,600		+13	+23	
66.	Maple syrup	gallons	370	323	254		177	195		-30	-23	
67.	Maple sugar	Lbs.	9	8	4		5	5.5		+25	+38	
68.	Veneer	bd.ft.	12,000		12,000		13,800	15,600		+15	+30	
69.	Ash handle stock	bd.ft. 9/	12,200	13,500	15,000		18,000	20,700		+20	+38	

Timber Production Possibilities in Forested Areas

1. Has the timber supply in the county, both farm and nonfarm forests, been depleted to the point where sales are relatively insignificant? _____ (yes or no)
2. If not, will the present supply run out within: 2 ( ), 5 ( ), 10 ( ), more than 10 years ( )? (check one)
3. If not, are the supplies sufficient to support safely more woodworking industries? _____ (yes or no)
4. If supplies are sufficient, what types of plants are recommended? _____

1/ As reported by BAE (formerly by AMS) or adjusted to BAE revised State totals for all items for which BAE data are available. Data for other items should be obtained from the best source available. Record data for 1939 and for at least one additional year which should be the most recent for which figures are available. 2/ A desirable step in developing 1943 estimates. 3/ Estimated production, acreages of crops or livestock numbers feasible (productive capacity in view of national needs and the prospective local farming situation) in 1943. 4/ Estimates of long-time desirable adjustments should be made for the items indicated by an asterisk (*) in this column. Estimates for additional items are optional with the working committee. 5/ Planted. 6/ Harvested. 7/ The total acres of sod crops will be less than the sum of the acreages in lines 33 to 37 inclusive to the extent that both a hay and a seed crop are harvested from the same land in the same year. 8/ Estimates furnished by the Central States Forest Experiment Station. 9/ Log scale.

total as that grown in 1941.

Burley tobacco acreage in 1942 and 1943 was estimated at 12,500, an increase of 8 per cent over 1941, whereas cigar filler tobacco in the Miami Valley in 1943 was estimated at 11,000 acres, 13 per cent below the acreage in 1941, and 44 per cent below the 10 year, 1930-39 average. Low prices for a period of several years are responsible for the decline.

Sugar beet acreage in 1942 and in 1943 was estimated at 49,000, an increase of 20 per cent over the acreage planted in 1941.

The downward trend in the acreage of potatoes was expected to continue through 1943, the acreage in 1942 being 16 per cent below the goal set for the crop that year. Shortage of dependable labor with sufficient skills to handle planting, spraying, and other equipment was largely responsible for the drop.

The acreage of crops for canning and processing (peas, tomatoes, and sweet corn) will be increased in 1942, but will see little or no further expansion in 1943. The increase in canning tomatoes in 1942 will be more than that shown for all processed tomatoes (36,800 acres as compared with 29,100 acres in 1941). According to officials of the federal grading and inspection service in Ohio the acreage of tomatoes canned in 1941 was approximately 8,500. If, as is probable, the increase in total acreage of all processed tomatoes in 1942 is canned, and if there is only a small diversion from juice and such other uses to canned tomatoes, the acreage for canning will be at least doubled. How much more canning will be done is difficult if not impossible to estimate; the ultimate use depends on quality of tomatoes delivered, which in turn depends on weather conditions. Full plant capacity will be utilized. Greater concern was being felt over the inability of canners to contract larger acreages of sweet corn for canning, the increase being estimated at 10 per cent over 1941.

Small grain acreages in 1942 and 1943 will total about six per cent less than

in 1941. Wheat acreage in 1942 shows a 12 per cent decline, due both to wet, unfavorable soil conditions at planting time in the fall of 1941 and to a reduction in wheat acreage allotments. In spite of the need for winter cover following intertilled crops, the acreage of wheat for 1943 was estimated at approximately the same total as for 1942. Contributing factors are the relatively greater profits from other crops and the farmers awareness of the large carry-over of wheat. Substantial percentage increases for winter barley, still in the experimental stage, are forecast for 1943. The acreage of oats, a desirable feed grain especially in the dairy section of Ohio and a very satisfactory companion crop for new seedings of clover and alfalfa, will be maintained or increased very slightly in 1942 and 1943. A rotation with oats following corn requires less labor than when wheat is grown instead. Oats are also regarded more favorably now after two years of good yields and good prices, following a period of eight or nine years of poor yields and low prices. Had the latter conditions continued in 1940 and 1941, oats acreage would have declined greatly and soybeans would have witnessed an even greater expansion.

The total acreage of sod crops (hay, clover and other hay seeds, and rotation pasture) was estimated to decline from 3,834,000 in 1941 to 3,633,000 in 1943, a 5 per cent reduction. This is to be regarded as a step in the wrong direction, if soil productivity is to be maintained and if livestock production is to be increased. Some of this reduction in grass-land acreage may be offset in 1943 by improved quality and growth of roughages, due to the rapid increase in the use of lime in 1941 and 1942. The long-time desirable acreage of these sod crops was set at 4,585,000, approximately 20 per cent more than in 1941.

(B) Livestock and Livestock Products

Beef and veal production in 1943 was estimated at 484 million pounds, or only one per cent less than was produced in 1941. Cow numbers, both beef and dairy, and hence the number of calves raised, are expected to increase. But smaller

numbers of feeder cattle will be brought into the State and grain-fed cattle will be sold at lower weights, due to unfavorable price relationships existing between prices of feeder stock, finished beef cattle and hogs.

Pork production in 1942 was estimated at 1 billion, 200 million pounds, a 14 per cent increase over 1941, coming from about 9 per cent more market hogs and a 5 per cent greater average weight per hog marketed. This increased production is easily attainable with the larger feed supplies available in 1942; the production of corn in 1941 was more than 30 per cent larger than that in 1940. Pork production in 1943 will be 40 million pounds greater than in 1942; this increase will necessitate the feeding of larger amounts of wheat and the production of at least a normal corn yield in 1942. If a better than average corn crop is produced in 1942, pork production in 1943 may be correspondingly greater.

Milk production, while increasing 8 per cent over 1941, will fall only a little short of the goal set for it in 1942. In spite of labor shortages, the goal might easily have been exceeded had not the farm price of milk begun to decline in February, 1942. This was an unfortunate situation, leading many farmers to think that perhaps increased production was no longer needed. In 1943, with a further increase in number of cows and better production per cow, milk production is estimated at 5 billion, 400 million pounds, or 12 per cent above 1941. This estimate was made with the assumption that there would be an improvement in milk prices.

With favorable prices for poultry and poultry products, this enterprise will be expanded, the net liveweight of chickens produced in 1943 being estimated 12 per cent higher than 1941; egg production will increase 16 per cent over the 1941 level.

BALANCING LIVESTOCK AND FEED

In making estimates of the livestock and livestock products in Ohio in 1942 and 1943 it was essential to keep in mind the supplies of feeds produced and available for use on the farms within the State. It was assumed that there would be no increase in the shipments of grain from other areas.

In computing the amount of feed available within a given year it was necessary to estimate (a) the proportion of the various feed crops that would be fed in Ohio and (b) estimate the percentage that would be fed in the year when produced and in the succeeding year. Data published by the Bureau of Agricultural Economics 1/ were used as a guide in computing the first of these estimates. Only a small part of the grains reported as "sold" actually leave the State, the large part being sold to other farmers in the same or other areas of the State. The portion of a crop fed prior to December 31 of a given year depends upon the size of the crop and the need for that particular feed from harvest to the end of the year.

In estimating supplies of available feeds it was thought desirable to compute production of crops in 1942 and 1943 at a normal yield. These were placed somewhat above the 1930-1939 average but below those of 1941, except in the case of hay which was estimated above the 1941 level.

The quantities of feed needed for the livestock on farms in 1941, 1942 and the estimated numbers in 1943 were computed from feed requirement data compiled by the Department of Rural Economics, Ohio State University (Table 2). The computation indicates a shortage of corn and a surplus of other grains each year, while hay needs and supplies are closely balanced. After some substituting of one feed grain for another, it is seen that total available grains are short by some 50 to 60 thousand tons each year, only a little more than one per cent of the total needs.

1/ Farm Production, Farm Disposition and Value of Principal Crops, 1940-41.

Table 2. - Ohio Feed Requirements and Supplies, 1941-1943

	Corn (1,000 bu.)	Oats (1,000 bu.)	Other Grains* (1,000 bu.)	Total Grain (1,000 tons)	Hay (1,000tons)
1941:					
Milk cows	15,630	15,630			1,302
Other cattle	20,290	2,820			921
Hogs	83,424	2,274	5,634		
Sheep	2,276	1,138			228
Poultry	9,752	4,876	6,826		
Horses	9,180	11,475			688
Total required	140,552	38,213	12,460	4,920.6	3,139
Total available	133,358	45,250	13,392	4,854.2	3,167
1942:					
Milk cows	16,095	16,095			1,341
Other cattle	20,390	2,930			
Hogs	94,660	2,460	6,410		943
Sheep	2,269	1,135			227
Poultry	10,377	5,168	7,236		
Horses	8,660	10,825			650
Total required	152,451	38,613	13,646	5,295.8	3,161
Total available	146,348	43,850	15,246	5,249.2	3,181
1943:					
Milk cows	16,335	16,335			1,361
Other cattle	20,615	2,970			957
Hogs	97,798	2,538	6,623		
Sheep	2,314	1,157			231
Poultry	10,500	5,250	7,350		
Horses	8,400	10,500			630
Total required	155,962	38,750	13,973	5,406.1	3,179
Total available	148,916	39,400	18,350	5,341.1	3,200

* Wheat, rye and barley.

No estimate of the total quantities of corn and other feed grain shipped into Ohio were available.

To meet the needs of livestock feasible in 1943 will require several changes. Increased quantities of protein concentrates will have to be purchased for dairy cows and poultry. It is assumed these will be available by reason of the increased processing of soybeans. A slightly larger than normal proportion of the 1943 corn crop will have to be fed in the fall of 1943 unless either the 1942 or 1943 crop is of better than normal yield. This uncertainty will also tend to prevent feeding hogs to any great increase in weight. Further it is estimated that 16 million bushels of Ohio wheat will be fed in 1943, compared with about 12 million bushels in 1941 and 1942.

POTENTIAL PRODUCTION OF CERTAIN VITAL COMMODITIES IN 1943
(See Table 3)

Soybeans:-

It was estimated that 1,130,000 acres of soybeans with a total production of 21,020,000 bushels would be feasible in 1943. But if additional soybeans are needed in 1943 Ohio farmers might plant an additional 500,000 acres, which at normal yields would produce 9,300,000 more bushels. Further, if soybean growers were to follow practices recommended by agronomists the total production on the 1,630,000 acres might be pushed up to 33,350,000 bushels. The crops necessarily curtailed by this expanded soybean acreage would be oats, hay and rotation pasture, corn, and soybean hay. To achieve this expansion would require an intensive educational program and a higher price (2.00 to 2.25 per bushel). The following are the principal factors limiting further expansion: (a) the inability to harvest soybeans in time to follow with wheat, or other fall-sown small grains, the result being too drastic a curtailment in the acreage of clover, alfalfa, and other sod crops; (b) a shortage of combines sufficient to harvest any further expanded acreage in time to prevent serious loss in quality; (c) inadequate storage and handling facilities; (d) and probable shortage of seed if proper steps are not taken to insure the saving of a sufficient supply in the fall of 1942.

Sugarbeets:-

Ohio farmers, if occasion demands, could expand their sugar beet production from an estimated feasible 49,000 acres to a maximum or potential of 60,000 acres. This increased acreage at a normal yield of 8.5 tons per acre would produce 510,000 tons. With a sufficiently high price, an intensive educational program to insure the adoption of good cultural practices, and an adequate supply of labor to tend the beets, it is entirely possible that the yield could be raised to 10 tons per acre, producing a crop more than 50 per cent larger than that of 1941. This

Table 3. - Ohio: 1943 Potential Production of Certain Vital War Commodities

Commodity	1943 feasible	Practicable limit of expansion, 1943			Enterprises which would be curtailed	Conditions required to attain expansion	Factors limiting further expansion
		Acres or numbers	Production				
			With normal yields	With potential yields			
Soybeans	1,130,000 A. 21,020,000 bu.	1,630,000 A.	30,318,000 bu.	33,350,000	Oats hay and pasture; corn; soybean hay	Price $2.00-$2.25; liming on 25% of area; timely planting and other desirable practices	inability to fit beans into rotation with sufficient grass; shortage of combines; inadequate storage; probable shortage of seed
Sugar beets	49,000 A. 390,000 T.	60,000 A.	510,000 T.	600,000 T.	Corn; hogs; dairy products	Profitable price level; beets following heavy sod; heavy fertilization; spraying or dusting; sufficient labor	Limited number of experienced growers; shortage of labor; shortage of transportation, storage, plant, and processing capacity; shortage of fertilizer; spray material and seed.
Hogs	1,240 million lbs.		1,715 million lbs.	1,865 million lbs.	Beef, 20% Reduce: Soybeans 300,000A. Small grains, 150,000A. Sod crops, 150,000A.	Feed to heavier market weight: Increase: Corn: 600,000 A. Increase yield 3 bu. per acre.	Shortage of labor, machinery, etc. to produce more corn; limited physical capacity (housing, fencing, etc.); disease risk with greater numbers; timing the various production phases of 2 litter system; uncertainty of future pork prices.

Table 3.(Cont'd) - Ohio: 1943 Potential Production of Certain Vital War Commodities

Commodity	1943 Feasible	Practicable limit of expansion, 1943			Enterprises which would be curtailed	Conditions required to attain expansion	Factors limiting further expansion
		Acres or numbers	Production				
			With normal yields	With potential yields			
Milk	5,400 million lbs.			5,950 million lbs.	Beef; hogs	Increase cows to 1,115,000; increase production per cow 15 per cent over 1941; higher price for milk ($3.10 winter, $2.60 summer).	Shortage of labor and feed supply; uncertainty as to milk prices; sanitary regulations.
Wool	16,315,000 lbs.			18,394,000	lamb and mutton	60¢ per pound for wool; market smaller proportion of ewe lambs; better care and feeding of flock; refrain from selling freshly shorn sheep and lambs.	Relatively favorable prices for other livestock; limited housing and shortage of fencing material.

expanded acreage of beets would mean a curtailment of a like acreage of corn; both crops ordinarily following sod in the rotation. This in turn would curtail the production of pork in western Ohio, and even dairy production in northwestern Ohio since sugar beets are grown in areas in Northwestern Ohio which produce a surplus of corn, part of which is shipped or trucked east into deficit corn areas. There are many factors preventing further expansion of sugar beets. The number of farmers will be faced with shortages of seed, fertilizer, spray materials, and labor; trucking and rail facilities will be unable to handle any increased tonnage, and shortage of plant handling and storage capacity will curtail the acreage contracted by the sugar companies.

Pork:-

With normal yields of corn in 1942 and 1943 it was estimated that pork production might be expanded to a potential of 1 billion, 715 million pounds in 1943, a 38 per cent increase over the estimated feasible production for that year. This would necessitate raising 4 million acres of corn (an additional 600,000 acres, which it is assumed could be grown without government restriction) and reducing other crops to allow for the increase in corn. Crops which would be reduced and the probable extent of the required reduction are as follows: soybeans 300,000 acres; small grains 150,000 acres; and sod crops 150,000 acres. Less corn would be available for beef cattle feeding, beef production being curtailed by an estimated 20 per cent. Hogs would have to be fed to heavier weights, necessitating a favorable price relationship between the heavier hogs and the ordinary market weights of 215 to 230 pounds. Any untimely drop in the price of hogs, leading to uncertainty as to need of additional supplies of pork, such as happened in the case of milk in February, 1942, should be avoided.

If, an intensive educational program is carried on to insure the greatly expanded use of lime, adapted hybrids, fertilizer, better utilization of farm manure,

closer planting and other approved practices, corn might be increased by 12 million bushels (3 bushels per acre) in 1943. This would be sufficient to produce an additional 150 million pounds of pork.

The following are some of the factors limiting further expansion of pork: (a) lack of sufficient labor and machinery to produce additional corn; (b) shortage of housing, fencing and other elements of physical capacity needed for additional hog numbers; (c) the disease risk involved in greater intensification of the hog enterprise; (d) the timing involved in the various production phases of the 2-litter system, followed in Ohio, making it necessary to market hogs at about 6 months of age or before the succeeding litter needs the space in order to avoid duplication of feeding, watering, pasturing and housing facilities.

Milk:-

The production of milk for 1943 was estimated at 5 billion, 400 million pounds. Production might be expanded to a potential total of 5 billion, 940 million pounds under the stimulus of a higher farm price for milk, averaging $3.10 during the winter months and $2.60 during the summer. This volume of production would necessitate increasing cow numbers to 1,115,000 and increasing production per cow by 15 per cent over the average production in 1941. (The 1943 feasible production involved a total of 1,089,000 cows and a 7 per cent larger production per cow than in 1941). Livestock production would be curtailed along other lines, principally beef and hogs. Shortage of labor, restricted feed supplies, uncertainty over future milk prices, and strict sanitary regulations in urban milksheds are among the factors limiting further expansion of milk production.

Wool:-

The potential production of wool in 1943 was estimated at 18,394,000 pounds, approximately 13 per cent above the feasible production for that year. To attain

this production would require a substantial price rise, to around 60¢ per pound. Smaller numbers of ewe lambs would be marketed in the fall of 1942, these being held over for breeding. This would curtail marketings of lamb and mutton in 1942 and 1943. Increased growth of staple would require better care and feeding of flocks. Increased numbers of shearling pelts (not included in the above estimates of wool produced) could be secured by an educational program stressing the military need for this commodity and the better price to be secured by marketing lambs or sheep with a one-fourth to one-half inch growth of wool rather than sending them to market freshly shorn.

Factors limiting further expansion of wool production are the relatively favorable prices of other livestock, and the limited facilities (housing, fencing, etc.) for handling increased numbers of sheep.

INCREASING AGRICULTURAL PRODUCTION IN OHIO IN 1943

A In considering the possibilities under this title the following points were frequently brought out.

(1) Ohio is an industrial state. Sizable industrial cities are scattered throughout the agricultural area. There is a constant drain of labor from the farm to the city and to military service. If labor is to be kept on the farm, farm wages will have to be raised to a level more nearly that of industry.

(2) There has already been a considerable expansion in the volume of agricultural production for 1942 over 1941.

(3) More farmers mentioned prices than any other one thing as the factor which would determine the direction of production. There was little complaining about present prices except with milk. Many farmers reported difficulty in disposing of their eggs. The fall in milk prices from February to May raised the question in the minds of many farmers whether the same thing would not soon follow with hogs and other products.

(4) In general it was felt that there was sufficient farm machinery available to carry out the 1942 production provided all machinery was used at full capacity. With increasing scarcity of farm labor, 1943 will encounter a distinct shortage of farm machinery, especially such items as milking machines, hay loaders and power mowers.

(5) The transportation of farm products to the market, and of supplies to the farm will become an increasingly difficult problem. The present overlapping of truck routes in the assembling, particularly of milk and livestock, should be eliminated. Here is a field in which cooperative marketing agencies might well take an active part.

B Increasing Crop Production in 1943.

(1) It is believed that in view of the above the acreage of grain and other cultivated crops in 1943 will not greatly exceed that of 1942, that further increases in production can more reasonably be secured from increased yields per acre.

(2) If corn acreage is to be greatly increased over that of 1942 the increased acreage should be secured on those farms which now have a low corn acreage in proportion to their productive capacity. If A.A.A. corn allotments are continued the allotment should be raised on those farms which have a low acreage because of a low historical base. Crop allotments should be based on the capacity of the farm to produce.

(3) A farmer might well be paid in the form of bonuses for following certain good farm practices which will increase yields. This might include applying lime and fertilizer, seeding legumes, and in using good seed. Many farmers suggested that more, if not all, A.A.A. payments should be made in conservation materials.

(4) Many farmers spoke of their inability to get delivery on A.A.A. lime this spring. This should be remedied. Bids might be accepted from all dealers, prices posted and the farmer allowed to choose.

C Ways of Increasing Crop Yields in 1943.

It is estimated that if no lime is applied for the next five years, crop production will be reduced by five per cent. If the 1941 rate of application is continued for five years, crop production will increase by eight per cent. The rate of lime application could well be double that of 1941 if and when available. Superphosphates should be doubled if and when available. The proper care of manure would bring about increases in crop yields equal to a doubling of the commercial fertilizer.

Corn

(1) Increasing the acreage planted to hybrid seed from 80 per cent of the acreage in 1942 to 90 per cent of the acreage in 1943.

(2) Shift to higher yielding hybrids. Through plans already made superior hybrids are available for planting an additional 1,000,000 acres in 1943. This would increase the volume of corn by 3,000,000 bushels.

(3) Increase rate of planting on the better corn land from 8,500 plants per acre to 10,500 plants. By this means 3,000,000 bus. of corn (5 bushels per acre) could be realized.

(4) Timely planting on 350,000 acres now tardily planted would increase the yield on those acres by 6 bushels, a total of about 2,000,000 bushels.

(5) Increase potash application in fertilizer.

(6) Scarcity of labor may lead to some shift from corn to soybeans.

Soybeans

(1) Substitute high oil bearing varieties for low oil bearing varieties. This shift would provide 4,000,000 lbs. more oil.

(2) If optimum time of planting were achieved a gain of 2 bus. per acre could be obtained on the 20% of the acreage now planted late.

(3) There is need of the more general use of inoculants.

(4) Seeding in rows will give higher yields and earlier harvesting, but takes more labor.

(5) More lime is needed on 2 acres out of 3 in Eastern Ohio where 17 per cent of the soybeans are grown. This would increase the yields by 4 to 8 bushels per acre in the area limed.

(6) Means should be taken to insure the saving in the fall of 1942 of an adequate supply of seed of high oil yielding varieties.

(7) Factors which may limit the 1943 acreage are: (a) Inadequate storage (b) lack of lime (c) difficulty of getting grass seeding after soybeans (d) a local scarcity of seed of high oil yield variety.

(8) Growers felt that they could not continue for long the present acreage of soybeans without depleting their soil.

(9) Late corn planting in 1942, and many poor new meadows encouraged expansion of soybean acreage in 1942.

Sugar Beets

(1) Plant beets after heavy sod.

(2) Increase the use of fertilizer.

(3) Expand the practice of spraying and dusting.

(4) Factors which will tend to limit the 1943 acreage of sugar beets are (a) the limited number of experienced growers (b) limited plant storage and processing capacity (c) labor shortage (d) seed shortage.

Hay

(1) Increase the use of phosphate, potash and lime.

(2) On established alfalfa stands top dress with phosphorus or phosphorus and potash after first cutting. On unthrifty stands this would add $\frac{1}{2}$ ton per acre.

(3) Greater use of hay silage, especially for first crop.

(4) Insure an adequate supply of legume seed. This might justify the establishment of a minimum price for alfalfa and clover seed or the paying of a bonus for its harvest.

(5) Increase the carrying capacity of pastures by fertilization.

(6) A shortage in the available supply of lime or fertilizer would handicap the full use of the above practices.

Wheat

(1) There is a feeling on the part of many that the wheat supply problem could in part be solved by having a lower relative loan rate on wheat or a two price system whereby the surplus wheat could compete with other feed grains. This would encourage the shifting to other crops.

(2) Ohio farmers in part maintain their wheat acreage as a means of securing a new seeding of grass.

INCREASING LIVESTOCK PRODUCTION IN 1943

With livestock the general opinion was that due to the shortage and lower quality of farm labor there would be very little net improvement in the efficiency of feeding and caring for livestock in 1943. That with livestock a large part of any increased production would come from increased number or feeding to heavier weights. Increased numbers in itself will probably lead to poorer management. There should be an intensive educational campaign on better feeding and management practices. In view of the large available supply of protein feed every effort should be made to have this fed in sufficient quantities to balance the ration.

Hogs

(1) It appears that there will be a sufficient number of sows to produce the pigs to consume the corn that will be produced in Ohio. Numbers for 1943 will depend much upon the 1942 crops. The 1941 Ohio corn crop will be consumed largely by livestock sold in 1942.

(2) Hogs might be fattened to a weight 5 or 10 per cent greater than normal. However, in Ohio which is a two litter state, this would raise the problem of getting the one litter out of the way in time to start feeding the second litter. The problem would also arise of getting the hogs ready for market before the period of heavy market receipts.

(3) The more pigs that are raised per sow the less the tendency to feed to heavy weights.

(4) With the same price for 200 lb. and 250 lb. hogs, it does not pay the Ohio farmer to fatten above 250 lbs.

(5) The decline in the price of milk has made many hog producers feel that the same may soon happen to hogs.

(6) A rise in the price of corn would curtail pork production less than a decline in the price of hogs.

(7) Increasing use could well be made of legume pasture.

(8) The amount of protein feed should be increased. There might well be some arrangement which would provide cheap protein feeds to the farmer.

(9) Increased attention should be given to swine sanitation.

Dairy Cows

(1) Increased dairy production will probably continue to be a combination of increased number of cows milked and higher production per cow.

(2) Dairymen are in a state of uncertainty as to milk production. The decline in the price of milk beginning in February has raised the question in the producer's mind as to whether the production of milk has not already been unduly expanded. There was a feeling that with present feed and labor costs, an average price of around $3.00 per cwt. would be needed to expand milk production.

(3) At present relative prices there may be more tendency to expand hog production than dairy production.

(4) Sanitary requirements were mentioned by many as reasons for shifting from market milk production.

(5) The use of more high quality roughage such as grass silage in summer or rotation pasture is suggested.

Beef Cattle

(1) An increase of beef production does not seem probable at present relative prices for feeder cattle, beef and hogs.

(2) Grain fed beef cattle will probably be sold at 100 to 200 pounds lighter weight.

(3) Small packers are now finding their business unprofitable.

Sheep and Wool

(1) There could be a considerable expansion by the doubling in size of many small flocks.

(2) An increase could be secured by selling more of the lambs at an accepted market weight.

(3) Parasite control should be more extensively and thoroughly practiced.

(4) The increased production of shearling pelts (with 1/4 to $\frac{1}{2}$ inches of wool) could be greatly expanded by an educational campaign.

Poultry and Eggs

(1) With favorable prices poultry will probably increase in number in 1943 and the goals will be attained.

(2) Many small flock owners spoke of the difficulty which they have been experiencing in disposing of their eggs. This is in part due to new Ohio egg grading law.

A Few Suggestions for Immediate Action

1. Develop a program to insure an adequate supply of legume seed this year.
2. Insure the saving of an adequate supply of soybean seed of high oil-yielding varieties this year.
3. Change method of letting A.A.A. lime contracts to insure necessary supplies this fall.
4. Promote the improvement and expansion of farm storage facilities, particularly for soybeans and small grains.
5. Encourage economical use of farm trucks and commercial trucks transporting farm products and supplies.
6. Develop a plan for assigning A.A.A. allotments based on the productivity of the farm.

The original report contained additional sections in which data were presented for each of the three agricultural areas of the State.

APPENDIX

STATEMENT OF THE AGRICULTURAL ADJUSTMENT ADMINISTRATION

Regarding the 1943 Production Possibilities of Ohio Farmers
(Townshend Hall, June 16)

Every indication and all records reviewed by the members of the Ohio U.S.D.A. War Board and the A.A.A. would point to an outstanding accomplishment of Ohio farmers in 1942. That accomplishment is not only the reaching of goals but in most cases the surpassing of the production goals for 1942. This has not been accomplished without great difficulties; in fact it has been accomplished in the face of less farm help, less available transportation, and considerably less farm machinery than the farmers desired.

Perhaps the greatest difficulty encountered by many Ohio farmers was the marketing of dairy and poultry products at satisfactory prices. While the farmers have reached and exceeded their dairy and poultry goals, the results from their viewpoint have not been entirely satisfactory.

The price of milk, which was rather satisfactory in the early winter months of 1941 and 1942, took a decided slump in the later winter and the spring months of 1942. A number of factors entered into this situation. In some instances the local plants did not have sufficient equipment to handle the increased volume. In some instances it seemed that the processing equipment was available but the processors were rather reluctant to put this machinery into operation and operate at capacity because some of their profit incentive had been removed. The result was a drop of from 50 to 40 cents in the price of milk to Ohio farmers.

The egg situation was somewhat similar, although not quite as acute. This was brought about primarily by two factors; the lack of fillers for egg cases, and the new Ohio law requiring the grading and proper designation of grades of eggs.

It would seem apparent that the goals set for agriculture in 1943 will be higher than those established for 1942. In order to reach these goals and to help produce

the food that will not only win the war but write the peace, it seems that certain very definite steps must be taken to remove some of the difficulties encountered.

One of the immediate factors in the repair of farm machinery, which has been and needs to be followed closely, is the difficulty in securing welding rods. At this time it is necessary that each individual welder have a priority order before the welding rods for farm machinery repair may be secured. Some authority who is familiar with the needs and the local conditions of agriculture should be designated to grant the priority so that farm machinery repair insofar as it is augmented by welding not be delayed.

Farmers will find the shortage of new farm machinery in 1943 more acute than in 1942. This will mean that the ingenuity of agriculture will be taxed to an even greater degree. The logical answer to this difficulty is more cooperative use of farm machinery. It is believed that in most communities there is sufficient farm machinery to take care of the agricultural production if arrangements are made for the extensive use of this machinery. With such arrangements and the repairs for farm machinery kept at its present level, it would seem that there should be no shortage of machinery to handle the various commodities on the farm.

The supply of paper is not as small as it appeared to be in the late winter months of 1942. Thus, the filler problem for egg cases seems to be taken care of.

However, one of the greatest hindrances to production is that of milk. A number of things will be necessary to help the farmer properly market and produce milk. Personally, I am yet to be convinced that the facilities for processing all of the milk produced by Ohio farmers in 1942 and the probable greater quantities in 1943 are not available. Yet a number of instances have been called to our attention and have caused the War Board no little grief, where it was necessary to dispose of skim milk by the sewer method.

It appears that the transportation of farm commodities, especially milk, will

become quite a problem in the next year. It is my opinion that the question could be solved in almost its entirety by the proper rearrangement of milk routes and the assignment of milk to various processing plants. In many cases trucks with loads of milk are driving well in excess of 100 miles per day. In fact, in many cases nearly 200 miles, passing several processing plants before their load is actually delivered and unloaded. Many farm roads having 3 or 4 farmers living along them have as many milk trucks picking up milk and delivering to as many different plants. In view of the apparent shortage of rubber and transportation facilities, it would seem only logical that some definite steps be taken to rearrange and reroute this milk to the processing plant where it takes the least mileage. It would be possible to save at least one new set of truck tires every day, and 2 to 3 trucks every week.

Proper cooperation and planning with the necessary authority placed in the hands of a committee favorable and friendly to agriculture would seem the logical answer.

The same thing is true in a lesser degree as it pertains to the transportation of poultry products, livestock and grain.

The war situation has brought to the realization of many thinking farmers the need for cooperation as never before. In my opinion, careful planning, proper education and guidance, with a spirit of willing cooperation of all persons involved, will remove the obstacles that stand in the way of successful increased production for 1943.

STATEMENT OF THE FARM SECURITY ADMINISTRATION

Promoting Increased Agricultural Production in 1943 in Ohio

The following suggestions are made primarily as applying to family sized farms. A substantial increase in production is possible on the smaller and poorer farms provided certain handicaps are approached in a constructive manner.

I. Factors hindering the further increase in production of the various needed agricultural products in Ohio.

a) Limited soil fertility.
b) Lack of minor improvements.
c) Insecurity of tenure.
d) Shortage of working capital
e) Poor management practices.
f) Lack of planning.
g) Lack of health and energy of families to carry out good production program.
h) Shortage of experienced farm labor.
i) Marketing problems

II. Means and methods of promoting the production of the needed volume of agricultural products in Ohio in 1943.

a) Build cropping program on individual farms that will prevent erosion and increase soil fertility. This would involve the use of lime, fertilizer, leguminous crops and erosion control practices on rolling land.

b) Obtain necessary improvements such as (1) fence for garden, (2) fence for poultry, hogs and some other temporary fence to maintain livestock on clean ground and utilize forage crops.

c) Development of more satisfactory leasing arrangements and reorganization of debt structure.

d) Disseminate information to all farmers relative to the use of the various forms of credit not available to them.

e) Emphasis in all agricultural programs on better management practices. Along with this emphasis, there should be a simplification of technical information so that it is easily understood.

f) Emphasis in all agricultural programs on planning for the seasons and on a long-time basis to obtain proper balance, and best use of all resources available to the family. On small farms, plan for more efficient use of all family labor, and for efficient use of necessary equipment. This means better care of equipment, more joint use of equipment with neighbors and in some instances better equipment.

g) Emphasis in all agricultural programs on good nutrition based on a "live-at-home" program. This would mean that all agencies would emphasize the importance of home gardens, use of home produced milk, meats, eggs, grain, etc. in order to: (1) meet nutritional needs of the family, and (2) release foods for war use.

h) Encourage farm boys and other farm laborers to stay on the farm. To accomplish this (1) the price of farm products must be sufficiently high to permit farmers to pay wages that will compete with industrial wage rates; (2) selective service deferment for agricultural work should be sufficiently long to assure that production for the year can be maintained.

i) Cooperative marketing of dairy products, livestock, eggs, etc. should be developed in order to overcome some of the inefficiencies now handicapping the marketing process particularily on small farms.

STATEMENT OF THE SOIL CONSERVATION SERVICE

Factors Hindering Further Increases in Production in Ohio.

1. Labor skilled in farm techniques, especially labor skilled in production of livestock and livestock products.
2. Prices for farm products do not enable farmers to compete with war industries for labor.
3. Some dairy cows may have been "burned out" by heavy grain feeding last winter and may not produce as heavy this coming winter as they did during the one just closed.
4. Too many Ohio farmers are not real dairymen and do not know how to get the most out of the dairy cows now on their farms.
5. The time required to increase the number of producing cattle, both dairy and beef.
6. Machinery necessary to grow crops now to certain farmers, for instance, sugar beets and soybeans.
7. Farm storage facilities may be inadequate for the crops of small grains and soybeans.

Means and Methods of Promoting Production in Ohio

1. Impress draft boards with the skilled nature of farm labor, especially for the production of livestock and livestock products and with the essential character of agricultural production.
2. Maintain prices for agricultural products which will enable farmers to pay higher wages.
3. Conduct an intensive educational program regarding dairy feeding and management in those sections of the state where production per cow is lowest.
4. All agricultural agencies should emphasize in their contacts with farmers:
    a. The desirability of higher acre yields rather than increased acreage.
    b. The effect of soil and water conserving practices on crop yields.
    c. The effect which proper handling of farm manures will have upon crop yields.

5. Maintain the production of commercial fertilizers at the highest practicable level.

6. Maintain the production of labor saving farm equipment, especially of milking machines.